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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/606,933

06/27/2003

Masashi Ookawa

2382-29

4457

23117

7590

06/28/2004

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EXAMINER

ARANA, LOUIS M

ART UNIT

PAPER NUMBER

2859

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                 |           |
|------------------------------|-------------------------------|---------------------------------|-----------|
| <b>Office Action Summary</b> | Application No.<br>10/606,933 | Applicant(s)<br>OOKAWA, MASASHI |           |
|                              | Examiner<br>Louis M. Arana    | Art Unit<br>2859                | <i>aw</i> |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/03</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of the claims is narrative and unclear to the point where it is unclear what the metes and bounds of the invention are. Claim 1 for example, describes the 'memorization unit " memorizing information indicative of the pulse sequence. A few lines below in the same claim, the scan unit is described as configured to scan the object using the "pulse sequence" memorized in the memorization unit. A pulse sequence and information indicative of a pulse sequence are not one and the same. The description in claim 1 relating to the "pre-pulse formed to be reduced in an application rate to the RF excitation, cannot be understood and is unclear at best. The specific deficiencies of the claims are too numerous to be mentioned individually. Applicant is urged to rewrite the claims in accordance with US practice. The present version of the claims, appear to be a literal translation.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ookawa  
Pub. No: US 2001/0004211.

As best understood, the claims at issue are anticipated by Ookawa. Ookawa discloses a MR method that uses pre-pulses in a segmented k-space acquisition scheme as shown in Fig.6. Note that k-space is divided into regions and that memory would be present in computer unit 12 of Fig.1.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Polzin, Pauly and Haase et al. all disclose segmented data acquisition methods for MRI. Note the abstract of each of the disclosures. Dixon discloses a prepulsing method for MRI. Note the general applicability of this method to a myriad of conventional imaging sequences as described by Dixon.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis M. Arana whose telephone number is (571) 272-2236. The examiner can normally be reached on M-Thurs. Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F Gutierrez can be reached on (703) 308-3875. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Louis M. Arana  
Primary Examiner  
Art Unit 2859

lma  
6/22/04